AMENDMENTS TO THE SPECIFICATION

Please replace the title at page 1, line 2, with the following rewritten title:

~~PLANT AMINOACYL-tRNA SYNTHETASE~~ POLYNUCLEOTIDES ENCODING CYSTEINYL-tRNA SYNTHETASE FROM *ZEA MAYS*

Please replace the paragraph at page 1, lines 3-4, with the following rewritten paragraph:

~~This application claims the benefit of U.S. Provisional Application No. 60/092,866, filed July 15, 1998.~~ This application is a divisional of U.S. Application No. 09/852,990 filed July 14, 1999, now granted as U.S. Patent No. 6,255,090, which claims the benefit of U.S. Provisional Application No. 60/092,866, filed July 15, 1998.

Please replace the paragraph at page 6, lines 16-38, with the following rewritten paragraph:

A "substantial portion" of an amino acid or nucleotide sequence comprises an amino acid or a nucleotide sequence that is sufficient to afford putative identification of the protein or gene that the amino acid or nucleotide sequence comprises. Amino acid and nucleotide sequences can be evaluated either manually by one skilled in the art, or by using computer-based sequence comparison and identification tools that employ algorithms such as BLAST (Basic Local Alignment Search Tool; Altschul et al. (1993) *J. Mol. Biol. 215*:403-410~~; see also www.ncbi.nlm.nih.gov/BLAST/~~). In general, a sequence of ten or more contiguous amino acids or thirty or more contiguous nucleotides is necessary in order to putatively identify a polypeptide or nucleic acid sequence as homologous to a known protein or gene. Moreover, with respect to nucleotide sequences, gene-specific oligonucleotide probes comprising 30 or more contiguous nucleotides may be used in sequence-dependent methods of gene identification (e.g., Southern hybridization) and isolation (e.g., *in situ* hybridization of bacterial colonies or bacteriophage plaques). In addition, short oligonucleotides of 12 or more nucleotides may be used as amplification primers in PCR in order to obtain a particular nucleic acid fragment comprising the primers. Accordingly, a "substantial portion" of a nucleotide sequence comprises a nucleotide sequence that will afford specific identification and/or isolation of a nucleic acid fragment comprising the sequence. The instant specification teaches amino acid and nucleotide sequences encoding polypeptides that comprise one or more particular

plant proteins. The skilled artisan, having the benefit of the sequences as reported herein, may now use all or a substantial portion of the disclosed sequences for purposes known to those skilled in this art. Accordingly, the instant invention comprises the complete sequences as reported in the accompanying Sequence Listing, as well as substantial portions of those sequences as defined above.

Please delete the paragraph at page 9, lines 16-38, that was inappropriately amended in Applicants' last amendment filed on November 25, 2002 (Paper No. 9, received by PTO on December 2, 2002), as follows:

~~A "substantial portion" of an amino acid or nucleotide sequence comprises an amino acid or a nucleotide sequence that is sufficient to afford putative identification of the protein or gene that the amino acid or nucleotide sequence comprises. Amino acid and nucleotide sequences can be evaluated either manually by one skilled in the art, or by using computer-based sequence comparison and identification tools that employ algorithms such as BLAST (Basic Local Alignment Search Tool; Altschul et al. (1993) *J. Mol. Biol. 215*:403-410; see also www.ncbi.nlm.nih.gov/BLAST/). In general, a sequence of ten or more contiguous amino acids or thirty or more contiguous nucleotides is necessary in order to putatively identify a polypeptide or nucleic acid sequence as homologous to a known protein or gene. Moreover, with respect to nucleotide sequences, gene-specific oligonucleotide probes comprising 30 or more contiguous nucleotides may be used in sequence-dependent methods of gene identification (e.g., Southern hybridization) and isolation (e.g., *in situ* hybridization of bacterial colonies or bacteriophage plaques). In addition, short oligonucleotides of 12 or more nucleotides may be used as amplification primers in PCR in order to obtain a particular nucleic acid fragment comprising the primers. Accordingly, a "substantial portion" of a nucleotide sequence comprises a nucleotide sequence that will afford specific identification and/or isolation of a nucleic acid fragment comprising the sequence. The instant specification teaches amino acid and nucleotide sequences encoding polypeptides that comprise one or more particular plant proteins. The skilled artisan, having the benefit of the sequences as reported herein, may now use all or a substantial portion of the disclosed sequences for purposes known to those skilled in this art. Accordingly, the instant invention comprises the complete sequences as reported in the accompanying Sequence Listing, as well as substantial portions of those sequences as defined above.~~

Please replace the Abstract with the following rewritten Abstract:

This invention relates to ~~an~~ isolated nucleic acid fragments encoding ~~an~~ aminoacyl-tRNA synthetases and particularly aspartyl-, cysteinyl-, tryptophanyl- and tyrosyl-tRNA synthetases from *Zea mays*, *Oryza sativa*, *Triticum aestivum* and ~~*Glycine max*~~ Glycine *max*. The invention also relates to the construction of a chimeric gene encoding all or a portion of the aminoacyl-tRNA synthetase, in sense or antisense orientation, wherein expression of the chimeric gene results in production of altered levels of the aminoacyl-tRNA synthetase in a transformed host cell.

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